THE ROLE OF MEDICAL AUXILIARIES IN RURAL HEALTH CARE

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Jan. 1976

Human Biology 198

About This Essay

The documentation I offer for this essay is that of my own experience as a health worker. I had no health background, but I did have the advantage of a biology education, which helped me approach problems systematically and rationally. I audited 4 months of the didactic portion of the Physician's Assistant Program at Stanford, and observed in the Clinical Labs, Parasitology Lab, and Emergency Room. I then spent 6 months working in a clinic in a Mexican village, staffed only by health workers. Much of this essay comes from my first-hand observations of health workers delivering comprehensive health care with no supervision, and of a working relationship between the community and the clinic. I learned a tremendous amount from experienced local village health workers who didn't have the advantage of a science-oriented education, thus demonstrated to me that it can be done. Myself and two others in turn tried to pass on our knowledge by organizing and teaching a paramedic type course for future clinic workers.

Since then, my continuing connections with the clinic, correspondence and personal encounters with others involved with training health workers, selected readings, and my work on our current project all have helped me to clarify and reinforce my thoughts on the potential role of health workers or medical auxiliaries, the results of which are in this essay.

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RURAL HEALTH CARE

It is becoming more and more apparent that the answer to health problems in the majority of the world's population does not lie in the promotion of Western medical practices. Western medicine as we know it has evolved in a largely urban, industrial setting, specially adapted to this lifestyle and population. Therural population in developing countries has evolved in a distinctly different manner, with its unique cultures and needs. Western medicine, with its highly trained doctors, sophisticated technology, and costly medical facilities, cannot be transplanted into an environment where the economic, social, and political systems are vastly dfferent. A different health care system must be devised which works within this cultural framework rather than against it. In this way, improved health care can more effectively reach where it is needed the most. In order to accomplish this, the situation in a given area must be examined. Different factors can be looked at separately, but it is the resulting composite picture which tells the story.

The availability of a health service can be described in several ways. Its physical accessibility and centrality to a geographical and population area are essential to calculating its effective outreach. Perhaps by decentralization of health facilities, primary health care can be within reach of all. Concentration of development of high quality services in one place does not help people in remote areas. If the same resources went towards delivering even marginal care over a wider area, more people would benefit and no one would be worse off.

Financial obstacles have prevented many from receiving much needed medical attention. The medical profession in many areas has a "medical monopoly"[1]. Membership in the medical establishment gives the right to diagnose diseases, treat patients, and charge fees according to the professional norm, which usually calls for prices only the wealthy can afford. This medical monopoly extends beyond simply fees, into the realm of national decision-making about health care priorities. One of the ways in which this monopoly is maintained is through the claim that doctors make better judgements with respect to diagnosis and treatment. While this may be true, it is of little help to a villager whose alternative is likely to be no medical care whatsoever. Any deviation from the system runs into opposition from the profession and the people who cater to it, who both control the social and political setting. Low-cost health care can be made available given the goodwill and foresight to do so, but it's a fight against a powerful and well-established system.

Sometimes a facility can provide readily available care at low-cost, but remain unpatronized. One cause of this which is often overlooked is a cultural barrier between the healer and the people. In a rural area where relationships are highly personalized, people tend to be hesitant to take their health problems to an outsider, especially if he demonstrated little understanding of their customs and way of life. Faith and acceptance of the healer and his type of medical care is a large part of the cure.

The scale of the facility, whether staffed by professionals or subprofessionals, should be considered. Big modern hospitals staffed mainly be professionals are necessarily located in large

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1) Dorozynsky, Alexander, Doctors and Healers

urban areas. Smaller "bush" hospitals are often run by a few doctors[2], medical auxiliaries, and nurses. One man professional offices are common in both urban and outlying areas. Sub-professional health workers can be classified in an infinite number of levels ranging from one who changes dressings to one with 3-4 years of formal training. In many rural areas where the doctor/patient ratio is extremely small, many people must rely exclusively on medical auxiliaries and nurses. Sometimes they are outsiders with formal training or local people who have received formal training elsewhere. In more remote areas it is more likely that local auxiliaries would have very informal training and continue to serve with or without supervision.

Traditional healers still play an important role in rural areas, especially where there is minimal contact with modern medicine. Midwives, herbalists, bonesetters, shamans, spiritualists, and healers are often more effective in the people's eyes than a doctor who has come to set up a practice.

The type of health care must be considered in terms of how effectively it is received. For example, a doctor is not necessarily more effective than an auxiliary. An auxiliary can recognize and handle many of the more obvious problems, just as well as a doctor can. In many cases, an auxiliary can be more effective in preventive medicine, health education, or a problem dealing with traditional medicine. In the latter instance, the cultural distance between the doctor and local people affects

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2) The term "doctors" must be qualified. It is now occasionally used to describe auxiliary medical personnel. Throughout this paper however, the term will refer to professional medical school graduates.

how faithfully the people will follow the doctor's advice.

Health care is also looked at in terms of curative and preventive medicine. A balance needs to be reached between the two in order to be effective in the long run. Hospitals and professionals generally are more concerned with curative care, while auxiliaries are more effective in the preventive aspect. A good health care system can be designed combining both in an appropriate manner.

The appropriate type of health care for a given area is developed by fitting the type to the particular needs of the community. One can ask: Is a big fancy hospital appropriate in a remote area? How important is high technology, and high quality practices? The question really is how to create a system in which the best possible health care is delivered to everyone, within the limitations imposed by the available resources.

Both Ivan Illich[3] and Maurice King[4] make the point in slightly different ways that resources <u>are</u> limited. King says that the starting point in the design of health care systems in poor countries is recognition of that poverty. Illich claims that regardless of the relative affluence of a society, the bottomless pit of health care consumption will either eventually consume all of the resources of the society, or people will consciously choose to limit the resources made available to health care,

More and more energy is now being directed towards the use of medical auxiliaries as a possible solution.

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3) <u>Medical Nemesis</u>, Ivan Illich

4) <u>Medical Care in Developing Countries</u>, Maurice King

It has become obvious that in order to meet the health needs of the vast rural population in developing countries , the answer is not to concentrate on training more medical professionals only. It takes a lot of time and money to complete their training, yet it is likely to be used later primarily in urban areas catering to the small upper class, or in developed countries like the U.S. and in Europe. For the same effort, a government or other organization can train many times that number of health workers, reaching a greater number of people over a wider area, able to perform innumerable functions in basic primary care. Given the tremendous health needs and the limited economic resources in developing countries, this seems to be the most practical, efficient, and effective solution.

There are many problems which enter from all sedes concerning medical auxiliaries. These include 1) internal factors such as the political, economic, and social environment in which the health worker must work, 2) external factors involving medical professionals, health program planners, and the larger health system, and 3) problems inherent in the approach to training medical auxiliaries. Fortunately, there are many new developments in this field, and much energy devoted towards resolving these problems.

The training begins with the selection process. How are health workers chosen? This can vary with the level of training. The character of the ibdividual is more critical in a rural, auxiliary based system because medical care is more personalized in a rural community. Who is going to make such a choice and on what should it be based? The motivations of the individual

need to be examined- is he interested in health just for humanitarian reasons? financial gain? political power? prestige? More formal established programs often work on an application or self-initiated basis such as the government INDAPS* 3-year program in Guatemala. Other programs scout out and select their trainees themselves. Most local health workers however, are selected by their communities. At the Behrhorst Clinic in Guatemala, selection committees composed of community members choose someone from their own village to be trained in the "health promotor" program. The barefoot doctors in the People's Republic of China are chosen in a similar manner, with the approval of local authorities.

In a small community, a health position may set the worker apart from others and enable him to manipulate others for his personal gain. The people are often accustomed to being"exploited"and subservient, so there would be no trouble in maintaining a higher position. The community structure becomes involved in this when its personalized nature affects the local health worker. There are more tangible social pressures which could affect who he would cater to. Who then, will he be responsible to and who will control his activities? A good system of selection and control has yet to be worked out.

Who are these health workers? Occasionally a young, educated person from an urban area will work in rural areas as a health worker. Most often however, it will be a young local person, perhaps with a better than average education.. He must be a part of the community in order to work within it, and able to gain the respect and faith of all the community members.

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* Instituto de Adiestramiento de Personal de Salud (Institute for the Training of Health Personnel)

A local health worker needs the support of his community in order to keep functioning. This social support is moer important than with medical professionals, who can function by economic support alone because their credential alone is enough to attract clients. Social support however, is more apt to break down through loss of faith, lack of interest, or continued belief that traditional healers and traditional medicine are more effective. It is foreseeable that this could impede the success of the health worker but it is difficult to work out a means of continued community support. Through understanding their particular way of life and recognizing their needs, a local health worker can perhaps better solicit support and meet these health needs.

Perhaps the potentially most effective health worker is someone who is already locally involved in medical care, such as the traditional healer, including the midwife. These people already have an established following and are in the best position to help the community recognize their own health needs and promote the measures with which to meet them. In many countries an effort is being made to take advantage of these ready-made health workers and train them. By integrating their traditional methods with more scientific health practices, improved health results from the harmony between the two approaches. Many programs are using this approach. In the Sudan,[5] the British started a school for further training of midwives. In China, the barefoot doctors practice a mixture of traditional Chinese medicine and Western medicine. In Guatemala, midwives can become officially licensed with yearly refresher courses required.[6]

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5) Bayoumi, Ahmed, "The Training and Activity of Village Midwives in the Sudan". mimeo

6) Lois Paul, personal communication

It's not very realistic to assume village health workers can learn a scientific approach to medicine, especially when they are already established traditional healers. Already set in their cultural and traditional background, it would be too easy to fall back on remedies they "know" will work, rather than pursue a methodical, rational approach. This can lead to the same mistakes that the training is attempting to rectify.

The educational level of the health worker presents a paradox for program planners. Certainly it is desirable to aim the training at people with a higher educational level within the village area. Unfortunately, these same people are more likely to wish to move on to a more desirable place or position once they become aware of better opportunities this training can open up to them. One almost needs to find health workers with minimal education.

Economic factors have a powerful influence over anyone and the medical auxiliary is no exception. His monetary compensation is going to be very low because the community has very few monetary resources and its aim for self-sufficiency would not be fulfilled if outside agencies helped significantly financially. As a result, the health worker is likely to discover he has a marketable skill which can bring higher revenues elsewhere, namely in the urban areas. What's to stop him? An attempt has been made to prevent a "brain drain" to more desirable areas, by training non-exportable medical professionals in a six year program in Yaounde, Cameroon. They are trained in medicine that is pertinent only to their area, and of little use in urban areas. The same could be done with medical auxiliaries. The more extensive programs, however, where training takes place in the cities, have a more difficult time. The trainee is entranced with city attractions, and often chooses to remain

there rather than return to his rural community.

The curriculum in these training programs must be based on simplicity. The education of health workers could range anywhere from illiteracy to 10 yrs. of schooling, so an effective training program needs to be designed which is flexible enough to allow the worker to develop his fullest potential. The extent of training is limited, so only medicine relevant to the worker's situation should be taught. A medical auxiliary need not be able to make a specific diagnosis in order to help a patient, but he must be able to identify an illness sufficiently to know how to manage it. The auxiliary need only learn enough basic science to fit it together with the skills and attitudes he uses in dealing with the sick person. With good management, almost any medical problem can be resolved. Certainly this is a tremendous improvement over the marginal care that existed before.

One approach might best be described as the "cookbook" method, another approach uses algorithms.[7] This is useful for someone with little basic education, but at the same time allows larger room for error and less room for questioning and insight which can't be built into this method.

The question now becomes: How much is a local health worker capable of doing? How much knowledge should you give him without making him dangerous? These are controversial questions which every health program is asking, but little is being done to search for a good answer. Instead, limitations on what the health worker can do are almost arbitrarily imposed by program planners. More often than not, these limitations are set way too low in terms of what health workers are capable of doing and the responsibility and self

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7) Diagnosis and Treatment for Medical Assistants, Dan Fountain

direction they are capable of assuming. The limitations in the capacity of the village health worker is thus determined more by extrinsic than intrinsic factors.

These pre-conceived expectations result from the "only-the-doctor" myth which implies medical care as having to be of the best quality or not at all (assuming doctors offer the best quality care, which is not always true). The fact remains that the majority of the world's population has very little care, often consisting of only local traditional healers. The major barrier which must be overcome is the notion that medical care by auxiliaries is "substandard" or "second-best". In fact it is a viable alternative which offers sully adequate care to those who really need it. As to the question of being "dangerous" by making mistakes, health workers are aguably no more dangerous than doctors. In a study carried out in Iran[8], a physician and an auxiliary with almost no medical training, independently saw the same 244 patients. In only 4 cases (less than 2%) did the auxiliary miss a potentially serious problem, none of which were life and death situations. Other similar studies have also shown that auxiliaries are very competent within their range of abilities. The point must be made however, that it is important to emphasize in training the need for health workers to recognize their limitations and to utilize any existing referral systems. This differs from the limitations imposed by program planners in that the hewlth workers are free to develop their skills to their fullest capabilities. Granted, there will be a tremendous range of abilities among health workers anywhere from only simple dressing changes to complex diagnoses, but those who are capable of more should be given opportunities for further training after

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8) Dr. Hossain A. Ronaghy, Dept. of Community Medicine, Pahlavi University, in Dorozynsky, A. Doctors and Healers

they have established themselves at one level.

While effective training methods are yet to be found, margin for error could make the auxiliary dangerous. Mistakes are inevitable even where no care at all would have been better. Mistakes are made at all levels, including professional, and it is difficult to get a baseline because the professionals set their own standards in evaluating each other. The "danger" and mistakes in auxiliaries can be minimized with medical support in the form of a referral system and a source of advice. Periodic evaluation, supervision, and refresher training can help maintain the quality of care. All this could be a further drain on the already strained medical resources, and in a remote area it would be next to impossible. Might it be just as feasible to spend the resources on training professionals who don't need constant supervision? A detailed cost benefit comparison needs to be done to accurately assess priorities.

What happens when a situation arises the health worker cannot handle? In an unsupervised setting, a system of referrals should be set up so that those who need more sophisticated treatment can be taken care of. In Venezuela, the "simplified medicine"[9] program has developed such a network.

The tremendous value of the medical auxiliary can easily be seen in such a system. They act as a"front line" and can screen and handle the majority of their patients themselves. In this way a doctor's valuable time can be better spent on those who really need more sophisticated care. Everybody operates much more efficiently under such a system. More people are reached, the doctor is not over-burdened and can therefore give better quality care, and the health worker is quite effective at his level.

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9) in Health by the People, Kenneth F Newell ed., WHO

Being of local origins, he is known and trusted by his fellows, and is familar with the problems indigent to the area and to the local culture. He can thus prescribe more effective remedies, and he is in a better position to promote preventive medicine and health educatin.

A hard look needs to be taken at the goals in training auxiliaries. Such workers need to be channeled in the right direction, but not stifled. They need to see their work as a constant challenge and be encouraged to further their education. In order to handle this well, we need more insight as to the character of the people in their cultural context. It's hard to search out the problems involved in setting up an auxiliary based system, and even harder to come up with good answers. A large obstacle to this is the project leaders themselves who are reluctant to take a realistic look at what is going on. Idealistic theories are continually expounded until people are under the delusion they are really working. A good example is the ideal that health care be in the hands of the community, but in reality it is still the program planner, an outsider who in the end makes all the decisions and channels the direction of health care. Health care has a long way yet to go in meeting the people's needs, so people have to stop thinking it can be done overnight.

It is imperative that something be done soon to help resolve the health problems in developing countries. Much energy is presently being devoted to developing the use of medical auxiliaries as a possible solution. Much research, experimentation, and evaluation still needs to be done. It has a long way to go, but in the long run it appears to be a worthwhile investment.

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